



#2 0400
11/6/02

Patent
Docket No: 56754US002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Jonathan Hester, Brian E.
Spiewak, David R. Holm, Jerald W. Hall, Jr., Seth M.
Kirk, Moses M. David, and Brinda Lakshmi

Group Art Unit:

Serial No.: 10/017,632

Filed: December 14, 2001

Examiner:

For: APPARATUS FOR SUBSTANTIAL REMOVAL OF ORGANIC SUBSTANCE(S)
AND/OR NITROGEN SOURCE(S) FROM AN AQUEOUS MEDIUM

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on:

February 20, 2002
Date

Kara C. Velle
Signature

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, DC 20231

Dear Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, enclosed please find a completed PTO-1449 form citing references submitted for consideration during examination of the above-referenced patent application. A copy of each of the references cited therein is also enclosed.

It is respectfully requested that the Examiner initial and return the enclosed PTO-1449 form in order to indicate that each of the references listed thereon has been considered in connection with the present application.

Registration Number 46,346	Telephone Number (651) 736-6933
Date February 20, 2002	

Respectfully submitted,

By

Kimberly S. Zillig

Office of Intellectual Property Counsel
3M Innovative Properties Company
P.O. Box 33427
St. Paul, Minnesota 55133-3427
Facsimile: (651) 736-3833

FEB 28 2002

OMB No. 0651-0011

**INFORMATION
DISCLOSURE
STATEMENT**

City. Docket No.: 56754US002

Serial No.: 10/017,632

Applicant(s): Jonathan Hester, Brian E. Spiewak, David R. Holm, Jerald W. Hall, Jr., Seth M. Kirk, Moses M. David, and Brinda Lakshmi

Filing Date: December 14, 2001

Group:

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	SubClass	Filing Date If Appropriate
	3,432,585	03/11/1969	E.R. Watson et al.			
	3,586,220	06/22/1971	Reinsberg			
	3,971,373	07/27/1976	Braun			
	4,181,604	01/01/1980	Onishi et al.			
	4,184,922	01/22/1980	Knazek et al.			
	4,537,860	08/27/1985	Tolbert et al.			
	4,539,256	09/03/1985	Shipman			
	4,576,718	03/18/1986	Reischl et al.			
	4,726,989	02/23/1988	Mrozinski			
	4,746,435	05/24/1988	Onishi et al.			
	4,814,278	03/21/1989	Hamamoto et al.			
	4,867,881	09/19/1989	Kinzer			
	4,894,060	01/16/1990	Nestegard			
	5,077,870	01/07/1992	Melbye et al.			
	5,116,506	05/26/1992	Williamson et al.			
	5,120,594	06/09/1992	Mrozinski			
	5,134,174	07/28/1992	Xu et al.			
	5,176,953	01/05/1993	Jacoby et al.			
	5,236,963	08/17/1993	Jacoby et al.			
	5,238,623	08/24/1993	Mrozinski			
	5,260,360	11/09/1993	Mrozinski et al.			
	5,317,035	05/31/1994	Jacoby et al.			
	5,352,513	10/04/1994	Mrozinski et al.			
	5,605,835	02/25/1997	Hu et al.			

FOREIGN PATENT DOCUMENTS

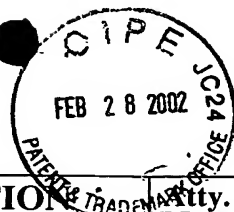
Document Number	Date of Publication	Country	Class	SubClass	Translation	
					Yes	No

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

EXAMINER

Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



OMB No. 0651-0011

**INFORMATION
DISCLOSURE
STATEMENT**

Atty. Docket No.: 56754US002

Serial No.: 10/017,632

Applicant(s): Jonathan Hester, Brian E. Spiewak, David R. Holm, Jerald W. Hall, Jr., Seth M. Kirk, Moses M. David, and Brinda Lakshmi

Filing Date: December 14, 2001

Group:

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	SubClass	Filing Date If Appropriate
	5,670,302	09/23/1997	Lau et al.			
	5,679,302	10/21/1997	Miller et al.			
	5,690,949	11/25/1997	Weimer et al.			
	5,712,154	01/27/1998	Mullon et al.			
	5,713,842	02/03/1998	Kay			
	5,738,111	04/14/1998	Weimer et al.			
	5,743,981	04/28/1998	Lu			
	5,792,411	08/11/1998	Morris et al.			
	5,888,594	03/30/1999	David et al.			
	5,899,893	05/04/1999	Dyer et al.			
	5,948,166	09/07/1999	David et al.			
	5,981,211	11/09/1999	Hu et al.			
	5,989,698	11/23/1999	Mrozinski et al.			
	6,010,776	01/04/2000	Exsted et al.			
	6,042,877	03/28/2000	Lyon et al.			
	6,068,771	05/30/2000	McDermott et al.			
	6,096,213	08/01/2000	Radovanovic et al.			
	6,110,588	08/29/2000	Perez et al.			
	6,147,131	11/14/2000	Mork et al.			
	6,168,648 B1	01/02/2001	Ootani et al.			
	6,274,638 B1	08/14/2001	Yonemura et al.			

FOREIGN PATENT DOCUMENTS

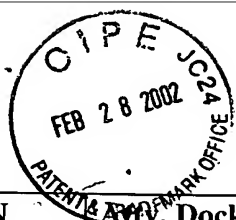
	Document Number	Date of Publication	Country	Class	SubClass	Translation	
						Yes	No
	EP 0 492 942 B1	12/17/1991	EPO				
	WO 00/43579	07/27/2000	PCT				
	WO 00/68301	11/16/2000	PCT				
	WO 00/71789	11/30/2000	PCT				
	WO 01/21693	03/29/2001	PCT				
	WO 97/44508	11/27/1997	PCT				
	WO 98/20185	05/14/1998	PCT				

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

EXAMINER

Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



OMB No. 0651-0011

**INFORMATION
DISCLOSURE
STATEMENT**

U.S. Patent Docket No.: 56754US002

Serial No.: 10/017,632

Applicant(s): Jonathan Hester, Brian E. Spiewak, David R. Holm, Jerald W. Hall, Jr., Seth M. Kirk, Moses M. David, and Brinda Lakshmi

Filing Date: December 14, 2001

Group:

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	SubClass	Filing Date If Appropriate
------------------	-----------------	------	------	-------	----------	----------------------------

FOREIGN PATENT DOCUMENTS

	Document Number	Date of Publication	Country	Class	SubClass	Translation	
						Yes	No
	WO 99/65542	12/23/1999	PCT				
	WO 99/65595	12/23/1999	PCT				
	WO 99/65664	12/23/1999	PCT				

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)


	Keth Brindle, Tom Stephenson, Michael J. Semmens, "Pilot-Plant Treatment of a High-Strength Brewery Wastewater Using a Membrane-Aeration Bioreactor," Water Environment Research, Volume 71, Number 6, pp. 1197-1204 (Sept./Oct., 1999).
	John T. Cookson, Jr., Bioremediation Engineering: Design and Application, McGraw-Hill, Inc., 1995, Chapter 8, pp. 305-358, and Chapter 9, pp. 359-432.
	"Water Treatment Membrane Processes," American Water Works Association Research Foundation, Lyonnaise des Eaux, Water Research Commission of South Africa, McGraw-Hill, Inc., Chapter 8 by P. Aptel and M.J. Semmens entitled "Multiphase Membrane Processes," pp.8.1-8.19.
	Y. Suzuki et al., "Oxygen Supply Method Using Gas Permeable Film For Wastewater Treatment," Wat. Sci Tech., Vol. 28, No. 7 pp. 243-250, 1993.
	M. Pankhania et al., "Hollow Fibre Bioractor For Wastewater Treatment Using Bubbleless Membrane Aeration, Wat. Res., Vol. 28, No. 10, pp. 2233-2236, 1994.
	Pierre Cote et al, "Bubble-Free Aeration Using Membranes: Process Analysis," Journal WPCF, Vol. 60, Number 11, pp. 1986-1992, Nov. 1988.
	Pierre Cote, "Bubble-Free Aeration Using Membranes: Mass Transfer Analysis," Journal of Membrane Science, 47 (1989) 91-106.
	Keith Brindle et al., "The Application of Membrane Biological Reactors for the Treatment of Wastewaters," Biotechnology and Bioengineering, Vol. 49, pp. 601-610 (1996).
	E. Casey et al., "Review of Membrane Aerated Biofilm Reactors," Resources, Conservation and Recycling 27 (1999) 203-215.
	Tariq Ahmed et al., "The Use of Independently Sealed Microporous Hollow Fiber Membranes for Oxygenation of Water: Model Development," Journal of Membrane Science, 69 (1992) 11-20.
	40 C.F.R. Ch. I (7-1-99 Edition), §§796.1050-796.3500.

EXAMINER**Date Considered**

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Based on Form PTO-FB-A820

Patent and Trademark Office, U.S. Department of Commerce

INFORMATION DISCLOSURE STATEMENT 	Atty. Docket No.: 56754US002	Serial No.: 10/017,632
	Applicant(s): Jonathan Hester, Brian E. Spiewak, David R. Holm, Jerald W. Hall, Jr., Seth M. Kirk, Moses M. David, and Brinda Lakshmi	
	Filing Date: December 14, 2001	Group:

U.S. APPLICATIONS		DO NOT PUBLISH
Examiner Initial		
	Serial No. 09/519,449, Diamond-Like Glass Thin Films.	
	Serial No. 09/758,764, Self-Mating Reclosable Mechanical Fastener and Binding Strap.	
	Serial No. 09/385,265, Capillary Collapse Resistant Microporous Material and Method.	
	Serial No. 10/023,267, Plasma Treatment of Porous Materials.	

EXAMINER	Date Considered
<p>*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p> <p>Based on Form PTO-FB-A820 (Also form PTO-1449)</p> <p style="text-align: right;">Patent and Trademark Office, U.S. Department of Commerce</p>	